TGFBR1 Peptide

Cat. No. TGFBR1-5523H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human TGFBR1is derived from human SMAD3 (215-230) and is suitable for use as thesubstrate for TGFBR1 superfamily.
Species	Human
Source	Sf9 Cells
ProteinLength	215-230 a.a.
Description	The protein encodedby this gene forms a heteromeric complex with type II TGF-beta receptors whenbound to TGF-beta, transducing the TGF-beta signal from the cell surface tothe cytoplasm. The encoded protein is a serine/threonine protein kinase.Mutations in this gene have been associated with Loeys-Dietz aortic aneurysmsyndrome (LDAS).
Form	Lyophilized
Purity	95.79% by HPLCanalysis
Molecular Weight	CRT194 Da
Amino Acid Sequence	KKKVLTQMGSPSIRC-S(pS)VS
Applications	Peptide Substrate.The peptide can be used as a substrate for the following active

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	proteinkinases: ALK1, ALK2, and ALK4.
Reconstitution	Dilute peptide in 20mM Tris-HCl, pH 7.5 tp a final concentration of 1 mg/ml.
Storage	Store product at-20°C. Stable for 1 year from date of shipment. For optimal storage, aliquotdiluted product into smaller quantities and store at -20°C. Avoid repeatedfreezethaw cycles.
OfficialSymbol	TGFBR1
Pathways	ALK1 signalingevents; Adherens junction; Chagas disease (American trypanosomiasis); Chronicmyeloid leukemia; Colorectal cancer; Cytokine-cytokine receptor interaction;Endocytosis; Glypican 1 network; HTLV-I infection; MAPK signaling pathway;Osteoclast differentiation; Pancreatic cancer; Pathways in cancer; SignalTransduction; Signaling by TGF beta; TGF Beta Signaling Pathway; TGF-betasignaling pathway

GENE INFORMATION

Gene Name	TGFBR1 transforming growthfactor, beta receptor 1 [Homo sapiens]
Synonyms	TGFBR1;transforming growth factor, beta receptor 1; AAT5; ALK5; MSSE; SKR4; ALK-5;LDS1A; LDS2A; TGFR-1; ACVRLK4; TGF-beta receptor type-1; tbetaR-I;OTTHUMP00000021783; OTTHUMP00000242324; OTTHUMP00000242325;OTTHUMP00000242326; OTTHUMP00000242329; TGF-beta receptor type I; TGF-betatype I receptor; activin receptor-like kinase 5; transforming growth factorbeta receptor I; serine/threonine-protein kinase receptor R4; activin Areceptor type II-like kinase, 53kD; activin A receptor type II-like kinase,53kDa; transforming growth factor-beta receptor type I; activin A receptortype II-like protein kinase of 53kD; transforming growth factor, betareceptor I (activin A

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	receptor type II-like kinase, 53kD); EC 2.7.11.30; Activin A receptor type II-like protein kinase of 53kD; Activinreceptor-like kinase 5; Serine/threonine-protein kinase receptor R4;Transforming growth factor-beta receptor type I
Gene ID	7046
mRNA Refseq	NM_001130916
Protein Refseq	NP_001124388
MIM	190181
UniProt ID	P36897
Chromosome Location	9q22
Function	ATP binding; I-SMADbinding; SMAD binding; contributes to growth factor binding; metal ionbinding; nucleotide binding; protein binding; protein heterodimerizationactivity; protein serine/threonine kinase activity; receptor activity;transforming growth factor beta binding; contributes to transforming growthfactor beta binding; transforming growth factor beta binding; transforminggrowth factor beta-activated receptor activity; contributes to transforminggrowth factor beta-activated receptor activity
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